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09/113,751	07/10/1998	STEPHEN R. LAWRENCE	11379	8400

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EXAMINER

COLBERT, ELLA

ART UNIT

PAPER NUMBER

3624

DATE MAILED: 11/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/113,751	LAWRENCE ET AL. <i>h</i>
	Examiner Ella Colbert	Art Unit 3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 July 2002.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,3-16,18-46,48-52,54-73 and 80-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,3-16,18-46,48-52,54-73 and 80-90 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>19</u> .	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
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DETAILED ACTION

Response to Amendment

1. Claims 1, 3-16, 18-46, 48-52, 54-73, 80-89 and newly added claim 90 are presented for examination. Claims 74-78 have been cancelled, claims 8, 9, 84, and 85 have been amended, and claim 90 has been added in this communication filed 07/31/02 entered as Amendment C, paper no. 18. Applicants' IDS filed 07/31/02 entered as paper no. 19 has been reviewed.
2. The claim objections to claims 84 and 85 have been overcome by Applicants' amendment to claims 84 and 85 and are hereby withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 16, 46, 52, and 86-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redfern (US 6,078,914) in view of "Text Search and Retrieval Examiner Training Manual for the Automated Patent System (APS), hereafter referred to as APS.

With respect to claim 1, Redfern teaches, forwarding a query to third party search engines (col. 2, lines 2-8); receiving and processing in parallel the responses from the third party search engines, the responses identifying documents in response to the query (col. 2, lines 37-44 and lines 52-67, col. 3, lines 1-15, col. 8, lines 66-67, col. 9,

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lines 1-8, col. 10, lines 25-44, and fig. 1 (32, 36, 38, and 42) the processing including the steps of: (a) downloading the full text of the documents identified in response to the query (col. 4, lines 9-21 and figure 1).

Redfern did not teach, locating query terms in the documents and extracting text surrounding the query terms and displaying the text surrounding the query terms and progressively displaying information regarding the documents, and the at least one context string surrounding one or more of the query terms for each processed document containing the query terms.

APS discloses locating query terms in the documents (page 5-2, lines 25-35, page 8-6 lines 5 & 6 and the screen drawing showing keyword in context (KWIC) and extracting text surrounding the query terms and displaying the text surrounding the query terms (page 8-9, line 6 and the drawing of a display screen). KWIC (Key Word In Context) is defined as displaying the following: Up to 20 terms on either side of the search term.

With respect to claim 16, this independent claim is rejected for the similar rationale given for claim 1.

With respect to claim 46, this dependent claim is rejected for the similar rationale given for claim 1.

With respect to claim 52, this dependent claim is rejected for the similar rationale given for claim 1.

With respect to claim 86, Redfern teaches, clustering the documents based on analysis of the full text of each document and identification of co-occurring phrases and

words, and conjunctions and displaying the information regarding the documents arranged by clusters (col. 9, lines 44-65, col. 33, lines 14-65, and Appendix J).

This independent claim is also rejected for the similar rationale given for claim 1.

With respect to claim 87, Redfern teaches displaying suggested additional query terms for expanding the query based on terms in the documents identified in response to the query (col. 5, lines 1-4).

This independent claim is also rejected for the similar rationale given for claim 1.

With respect to claim 88, Redfern teaches, receiving a query and transforming the query from the form of a question into the form of an answer prior to forwarding the query to the plurality of third party search engines (col. 2, lines 21-27 and col. 15, lines 42-49).

This independent claim is also rejected for the similar rationale given for claim 1.

With respect to claim 89, Redfern teaches displaying an indication of how close the query terms are to each other in the documents (col. 10, lines 64-67 and col. 11, lines 1-10).

This independent claim is also rejected for the similar rationale given for claim 1.

With respect to claim 90, Redfern teaches, including steps of creating a database of meta search information regarding query terms and using the database to display information relating to the query terms when a user uses those terms in a query (col. 2, lines 16-37)

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-15, 18-29, 48-51, 54-57, and 80-85 rejected under 35 U.S.C. 103(a) as being unpatentable over Redfern (US 6,078,914).

With respect to claim 3, Redfern teaches filtering the context strings in order to improve readability by removing redundant whitespace, repeated characters, HTML comments and tags, and special characters (col. 4, lines 35-67, col. 11, lines 55-67, and col. 13, lines 15-22). These claim limitations are well known in the art as editing a search string.

With respect to claim 4, Redfern teaches identifying and displaying a list of documents identified in response to the query which do not contain any query terms (col. 16, lines 1-11).

With respect to claim 5, Redfern teaches clustering the documents based on analysis of the full text of each document and identification of co-occurring phrases and words, and conjunctions (col. 9, lines 44-65, col. 33, lines 14-65, and Appendix J).

With respect to claim 6, Redfern teaches storing the documents matching a query so a query can be repeated and only showing documents which are new or have been modified since the last query or a given time (col. 1, lines 33-45 and col. 10, lines 39-45).

With respect to claim 7, Redfern did not explicitly teach, filtering the actual documents when viewed in full order to (a) highlight the query terms and (b) insert quick jump links so the user can quickly jump to the query term of interest, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate in Redfern filtering the documents when viewed to highlight the query terms and insert the jump links because such a modification would allow the user once the documents are filtered to enter keywords and click on a link to a document to see the highlighted keyword or keywords and the user can jump links to move back and forth from link to link to documents of interest, therefore, by using a jump link, this is a more efficient method of navigating from document to document and link to link.

With respect to claim 8, Redfern did not explicitly teach, creating and using a database of meta-information regarding query terms, storing a list of movie titles, recognizing when the user enters a query containing a movie title, and taking special action such as referring the user to the review of the movie at a specific movie review site, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate in Redfern the creation and use of a database of meta-information regarding query terms such as storing a list of movie titles, recognizing when a user enters a query term containing a movie title and taking a special action because such a modification would provide a database which is merely a collection of data stored on a computer storage medium such as a disk, that can be used for more than one purpose whether it is movie titles for searching the database or other information (meta-information (data information)).

With respect to claim 9, Redfern teaches, storing and using information regarding the particular documents requested by a user in response to a query by remembering the most commonly requested document for a given query and presenting this document first in response to the same query in the future (col. 1, lines 21-65).

With respect to claim 10, Redfern teaches, analyzing the number of documents found as a function of the number of third party search engines queried, and computing the estimated size of the document base which the third party search engines index (col. 11, 55-67 and col. 16, lines 6-46).

With respect to claim 11, this dependent claim is rejected for the similar rationale given for claim 6.

With respect to claim 12, Redfern teaches detecting and displaying duplicate documents by identifying duplicate context strings (col. 3, lines 39-45 and col. 4, lines 29-34).

With respect to claim 13, Redfern did not explicitly teach, caching the full documents in order to improve access speed, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to cache the full documents to improve access speed because it is well known by skilled artisans that cache is a place where data can be stored to avoid having to read the data from a slower device such as a disk. Microprocessors have an internal instruction cache for program instructions that are being read in from RAM; an external cache is also used, consisting of RAM chips that are faster than those used in a computer's memory.

With respect to claim 14, Redfern teaches displaying suggested additional query terms for expanding the query based on terms in the documents identified in response to the query (col. 4, lines 35-43).

With respect to claim 15, Redfern teaches after all responses have been processed, further including the step of using a ranking scheme to re-rank documents according to the number of and proximity between query terms, and re-displaying the information regarding the documents according to the ranking (in col. 3, lines 3-16 and lines 32-45 and col. 4, lines 20-28).

With respect to claim 18, this dependent claim is rejected for the similar rationale given for claim 3.

With respect to claim 19, this dependent claim is rejected for the similar rationale given for claim 4.

With respect to claim 20, this dependent claim is rejected for the similar rationale given for claim 5.

With respect to dependent claim 21 this claim is rejected for the rationale given for claim 6.

With respect to dependent claim 22 this claim is rejected for the rationale given for claim 7.

With respect to dependent claim 23 this claim is rejected for the rationale given for claim 8.

With respect to dependent claim 24 this claim is rejected for the rationale given for claim 9.

With respect to dependent claim 25 this claim is rejected for the rationale given for claim 11.

With respect to dependent claim 26 this claim is rejected for the rationale given for claim 12.

With respect to dependent claim 27 this claim is rejected for the rationale given for claim 13.

With respect to dependent claim 28 this claim is rejected for the rationale given for claim 14.

With respect to dependent claim 29 this claim is rejected for the rationale given for claim 15.

With respect to claim 48, this dependent claim is rejected for the similar rationale given for claim 3.

With respect to claim 49, this dependent claim is rejected for the similar rationale given for claim 4.

With respect to claim 50, this dependent claim is rejected for the similar rationale given for claim 5.

With respect to claim 54, this dependent claim is rejected for the similar rationale given for claim 3.

With respect to claim 55, this dependent claim is rejected for the similar rationale given for claim 4.

With respect to claim 56, this dependent claim is rejected for the similar rationale given for claim 5.

With respect to independent claim 57 this claim is rejected for the rationale given for claim 6.

With respect to claim 80, Redfern teaches, the step of transforming the query from the form of a question into the form of an answer prior to forwarding the query to the plurality of third party search engines (col. 2, lines 21-27 and col. 15, lines 42-49).

With respect to claim 81, Redfern teaches the step of progressively displaying includes displaying an indication of how close the query terms are to each other in the documents (col. 10, lines 64-67 and col. 11, lines 1-10).

With respect to claim 82, Redfern teaches, (a) displaying the information regarding the documents and at least one context string for a predetermined number of documents ranked using term proximity information (col. 8, lines 52-62); (b) displaying the information regarding the documents and at least one context string for documents that contain less than all the query terms (col. 15, lines 60-64); and (c) displaying the information regarding the documents that contain none of the query terms (col. 16, lines 1-11). Redfern did not teach (d) displaying the information regarding the documents and at least one context string for documents that contain duplicate context strings to documents displayed earlier and (e) displaying the information regarding the documents that could not be downloaded, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to display the information regarding the documents and at least one context string for documents that contain duplicate context strings to documents displayed earlier and display the information regarding the documents that could not be downloaded and to modify in Redfern because such a

modification would allow Redfern to remove the duplicate context strings and to know which documents could not be downloaded and why they could not be downloaded.

With respect to claim 83, Redfern teaches, the step displaying suggested additional query terms for expanding the query based on terms in the documents identified in response to the query (col. 5, lines 1-4).

With respect to claim 84, Redfern teaches, the step of displaying summary information regarding the documents found and processed the summary information being separately identified for each search engine (col. 24, lines 31-66, col. 25, lines 1-67, col. 26, lines 1-16 and lines 17-67, and appendix g shows the search results for Excite; col. 27, lines 1-66, col. 28, lines 1-66, col. 29, lines 1-30 and lines 31-40, and col. 30, lines 1-39 shows the search results for Lycos).

With respect to claim 85, Redfern teaches (a) for $n = 1$ to MaximumPhraseLength, for each set of successive n words, if this combination of words has not already appeared in this document, then add the set to a hash table for this document and a hash table for all documents (col. 1, lines 21-32); (b) for $n =$ MaximumPhraseLength to 1, find the most common phrases of length n to a maximum of MaxN phrases which occurred more than MinN times, and add these phrases to the set of clusters (col. 4, lines 59-67 and col. 5, lines 5-23); (c) find the most common combination of two clusters from the previous step to a maximum of maxC combinations for which the combination occurred in individual documents at least minC times (col. 6, lines 16-60); (d) delete clusters which are identified by phrases which are subset of a phrase identifying another cluster (col. 10, lines 54-58); (e) merge clusters which

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contain identical documents (col. 10, lines 59-63 and col. 11, lines 11-30); and (f) display each cluster along with at least one context string from a set of documents for both the query terms and the cluster terms (col. 15, lines 50-64). Redfern did not teach a hash table but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a hash table and to modify in Redfern because such a modification would allow Redfern to have a table of hash values that provides rapid access to data records with the hash function uniquely identifying each record with pointers to each record which is well known in the art.

Response to Arguments

7. Applicant's arguments filed 07/31/02 have been fully considered but they are not persuasive.

1. Applicants' argue: There is not teaching whatsoever in Redfern or APS of progressively displaying the search results in claims 1, 16, 46, and 52 and thus the Examiner has failed to make it a *prima facie* rejection of obviousness has been considered but is not deemed persuasive based on the following reasons:

(1) In response to Applicants' argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "progressively displaying the search results") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

(2) The Examiner does not interpret the claims as disclosing, suggesting or reciting "progressively displaying the search results". Claims 1, 16, 46, and 52 recite "progressively displaying information regarding the documents, and the at least one context string surrounding one or more of the query terms for each processed document containing the query terms." The Examiner has the following interpretation: Redfern did not teach locating query terms in the documents and extracting text surrounding the query terms to form at least one context string and progressively displaying information regarding the documents, and the at least one context string surrounding one or more of the query terms for each processed document containing the query terms. APS discloses locating query terms in the documents (page 5-2, lines 25-35, page 8-6 lines 5 & 6 and the screen drawing showing keyword in context (KWIC) and extracting text surrounding the query terms and displaying the text surrounding the query terms (page 8-9, line 6 and the drawing of a display screen). KWIC (Key Word In Context) is defined as displaying the following: Up to 20 terms on either side of the search term. It is for these reasons that the Examiner traverses Applicants' argument that the Examiner has failed to make it a *prima facie* rejection of obviousness.

2. Applicants' argue: There is no teaching or suggestion whatsoever in Redfern of clustering the documents retrieved in response to the query in claim 86 has been considered but is not persuasive because it is interpreted that Redfern teaches, clustering the documents based on analysis of the full text of each document and identification of co-occurring phrases and words, and conjunctions and displaying the

information regarding the documents arranged by clusters in col. 9, lines 44-65, col. 33, lines 14-65, and Appendix J.

3. Applicants' argue: there is no teaching or suggestion to transform the query into a form of an answer in claim 88 has been considered but is not persuasive because Redfern teaches, receiving a query and transforming the query from the form of a question into the form of an answer prior to forwarding the query to the plurality of third party search engines in col. 2, lines 21-27 and col. 15, lines 42-49. It is well known in the art of "surfing the World Wide Web" after receiving a query to ask a question then to forward the search query to a search engine for a response.

4. Applicants' argue: there is no teaching in Redfern to display a separate page that list these documents in claim 4 has been considered but is not persuasive because in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., to "display a separate page that list these documents") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 4 recites "identifying and displaying a list of documents identified in response to the query which do not contain any query terms in col. 16, lines 1-11. It is not interpreted that the claim limitation discloses or suggests to "display a separate page that list these documents".

5. Applicants' argue: there is absolutely no disclosure of the feature of updating a query so that only new documents that have come on line subsequent to the

previous query are displayed in claim 6 has been considered but is not persuasive because claim 6 recites "storing the documents matching a query so a query can be repeated and only showing documents which are new or have been modified since the last query or a given time" and is interpreted as being taught in col. 1, lines 33-45 and col. 10, lines 39-45.

6. Applicants' argue: the Examiner has provided absolutely no evidence to support the allegation that it would have been obvious to one of ordinary skill in the art to incorporate the feature of claims 90 and 8 in a meta search engine has been considered but is not persuasive because the motivation was set forth in the rejection of claims 8 and 80 as follows: Redfern did not explicitly teach, creating and using a database of meta-information regarding query terms, storing a list of movie titles, recognizing when the user enters a query containing a movie title, and taking special action such as referring the user to the review of the movie at a specific movie review site, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate in Redfern the creation and use of a database of meta-information regarding query terms such as storing a list of movie titles, recognizing when a user enters a query term containing a movie title and taking a special action because such a modification would provide a database which is merely a collection of data stored on a computer storage medium such as a disk, that can be used for more than one purpose whether it is movie titles for searching the database or other information (meta-information (data information)).

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7. Applicants' argue: Remembering commonly requested documents for future queries is clearly not discussed in Redfern has been considered but is not persuasive because claim 9 is not interpreted as disclosing or suggesting "remembering commonly requested documents for future queries". Claim 9 recites "storing and using information regarding the particular documents requested by a user in response to a query by remembering the most commonly requested document for a given query and presenting this document first in response to the same query in the future" is interpreted as being taught in Redfern in col. 1, lines 21-65.

8. Applicants' argue: there is no teaching or suggestion whatsoever in Redfern of estimating the size of the third party search engine and the size of the document base which the third party search engine index" has been considered but is not persuasive because the Examiner interprets Redfern as teaching "analyzing the number of documents found as a function of the number of third party search engines queried, and computing the estimated size of the document base which the third party search engines index" in col. 11, 55-67 and col. 16, lines 6-46.

9. Applicants' argue: the sections cited by the Examiner do not even deal with duplicates has been considered but is not persuasive because it is interpreted that Redfern teaches detecting and displaying duplicate documents by identifying duplicate context strings in col. 3, lines 39-45 and col. 4, lines 29-34 ("... to extract relevant terms and/or phrases therefrom.").

10. Applicants' argue: there is no teaching or suggestion in Redfern of a ranking system based on how close the query terms are to each other has been

considered but is not persuasive because it is interpreted that Redfern teaches "the step of progressively displaying includes displaying an indication of how close the query terms are to each other in the documents in col. 10, lines 64-67 and col. 11, lines 1-10.

11. Applicants' argue: none of the sections cited by the Examiner in Redfern teach any of the five methods of displaying documents set forth in claim 82 has been considered but is not persuasive because it is interpreted that Redfern teaches (a) displaying the information regarding the documents and at least one context string for a predetermined number of documents ranked using term proximity information in col. 8, lines 52-62; (b) displaying the information regarding the documents and at least one context string for documents that contain less than all the query terms in col. 15, lines 60-64; and (c) displaying the information regarding the documents that contain none of the query terms in col. 16, lines 1-11. Redfern did not teach (d) displaying the information regarding the documents and at least one context string for documents that contain duplicate context strings to documents displayed earlier and (e) displaying the information regarding the documents that could not be downloaded, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to display the information regarding the documents and at least one context string for documents that contain duplicate context strings to documents displayed earlier and display the information regarding the documents that could not be downloaded and to modify in Redfern because such a modification would allow Redfern to remove the duplicate context strings and to know which documents could not be downloaded and why they could not be downloaded.

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12. Applicants' argue: the sections cited by the Examiner in Redfern do not disclose the summary together with an excerpt from a document in claim 84 has been considered but is not persuasive because it is interpreted that Redfern teaches, the step of displaying summary information regarding the documents found and processed the summary information being separately identified for each search engine in col. 24, lines 31-66, col. 25, lines 1-67, col. 26, lines 1-16 and lines 17-67, and appendix g shows the search results for Excite; col. 27, lines 1-66, col. 28, lines 1-66, col. 29, lines 1-30 and lines 31-40, and col. 30, lines 1-39 shows the search results for Lycos).

13. Applicants' argue: there is no teaching or disclosure whatsoever in Redfern of a clustering algorithm and there is clearly no disclosure of the specific algorithm set forth in claim 85 has been considered but is not persuasive because it is interpreted that Redfern teaches (a) for $n = 1$ to MaximumPhraseLength, for each set of successive n words, if this combination of words has not already appeared in this document, then add the set to a hash table for this document and a hash table for all documents (col. 1, lines 21-32); (b) for $n = \text{MaximumPhraseLength}$ to 1, find the most common phrases of length n to a maximum of MaxN phrases which occurred more than MinN times, and add these phrases to the set of clusters (col. 4, lines 59-67 and col. 5, lines 5-23); (c) find the most common combination of two clusters from the previous step to a maximum of maxC combinations for which the combination occurred in individual documents at least minC times (col. 6, lines 16-60); (d) delete clusters which are identified by phrases which are subset of a phrase identifying another cluster (col. 10, lines 54-58); (e) merge clusters which contain identical documents (col. 10, lines 59-

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63 and col. 11, lines 11-30); and (f) display each cluster along with at least one context string from a set of documents for both the query terms and the cluster terms (col. 15, lines 50-64). Redfern did not teach a hash table but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a hash table and to modify in Redfern because such a modification would allow Redfern to have a table of hash values that provides rapid access to data records with the hash function uniquely identifying each record with pointers to each record which is well known in the art.

In conclusion: As to Applicants' arguments above, in this rejection of claim 1 and others, for example, under Section 102 of Title 35 of the United States Code and Section 103 of Title 35 of the United States Code, the Examiner carefully drew up a correspondence between each of the Applicants' claimed limitations and one or more referenced passages in Redfern, what is known in the art, and what is obvious to one having ordinary skill in the art. The Examiner is entitled to give the claim limitations their broadest reasonable interpretation in light of the Specification (see below):

2111 Claim Interpretation; Broadest Reasonable Interpretation [R-1]

>CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION

During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).<

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

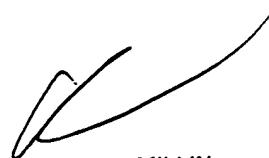
Inquiries

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 703-308-7064. The examiner can normally be reached on Monday-Thursday from 6:30 am -5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 703-308-1038. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for Official communications and 703-746-5622 for Non-Official communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.


E. Colbert
November 4, 2002


VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600